

**FEDERALLY ENFORCEABLE STATE  
OPERATING PERMIT (FESOP) RENEWAL  
OFFICE OF AIR QUALITY**

**E & B Paving, Inc.**

**Portable**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F 049-14844-03302	
Issued by:Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: August 6, 2002  Expiration Date:August 6, 2007

## TABLE OF CONTENTS

### SECTION A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-8-3(b)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]
- A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]
- A.4 FESOP Applicability [326 IAC 2-8-2]
- A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

### SECTION B GENERAL CONDITIONS

- B.1 Permit No Defense [IC 13]
- B.2 Definitions [326 IAC 2-8-1]
- B.3 Permit Term [326 IAC 2-8-4(2)]
- B.4 Enforceability [326 IAC 2-8-6]
- B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]
- B.6 Severability [326 IAC 2-8-4(4)]
- B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]
- B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5 (a)(4)]
- B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]
- B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]
- B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]
- B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]
- B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]
- B.14 Emergency Provisions [326 IAC 2-8-12]
- B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]
- B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]
- B.17 Permit Renewal [326 IAC 2-8-3(h)]
- B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]
- B.19 Operational Flexibility [326 IAC 2-8-15]
- B.20 Permit Revision Requirement [326 IAC 2-8-11.1]
- B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]
- B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]
- B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

### SECTION C SOURCE OPERATION CONDITIONS

#### Emission Limitations and Standards [326 IAC 2-8-4(1)]

- C.1 Overall Source Limit [326 IAC 2-8] [326 IAC 2-2]
- C.2 Opacity [326 IAC 5-1]
- C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]
- C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]
- C.5 Fugitive Dust Emissions [326 IAC 6-4]
- C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]
- C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]
- C.8 Stack Height [326 IAC 1-7]
- C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61 Subpart M]

#### Testing Requirements [326 IAC 2-8-4(3)]

- C.10 Performance Testing [326 IAC 3-6]

E & B Paving, Inc.  
Portable  
Permit Reviewer: CJF/MES

Page 3 of 44  
OP No. F 049-14844-03302

**Compliance Requirements [326 IAC 2-1.1-11]**

- C.11 Compliance Requirements [326 IAC 2-1.1-11]

**Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

- C.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]  
C.13 Monitoring Methods [326 IAC 3] [40 CFR 60][40 CFR 63]  
C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)]  
[326 IAC 2-8-5(1)]

**Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

- C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]  
C.16 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]  
C.17 Compliance Response Plan - Preparation, Implementation, Records, and Reports  
[326 IAC 2-8-4, 5]  
C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4, 5]

**Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]**

- C.19 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]  
C.20 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]  
C.21 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

**Portable Source Requirement**

- C.22 Relocation of Portable Sources [326 IAC 2-14-4]

**Stratospheric Ozone Protection**

- C.23 Compliance with 40 CFR 82 and 326 IAC 22-1

**SECTION D.1 FACILITY OPERATION CONDITIONS: hot mix asphalt manufacturing source**

**Emission Limitations and Standards [326 IAC 2-8-4(1)]**

- D.1.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]  
D.1.2 Particulate Matter (PM<sub>10</sub>) [326 IAC 2-8-4] [326 IAC 2-2] [40 CFR 52.21] [326 IAC 2-3]  
D.1.3 Particulate Matter (PM) [40 CFR 60.90] [326 IAC 12] [326 IAC 6-1] [326 IAC 2-2] [40 CFR 52.21] [326 IAC 2-3]  
D.1.4 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 2-8-4] [326 IAC 7-1.1-1] [326 IAC 7-2-1] [326 IAC 2-2] [40 CFR 52.21] [326 IAC 2-3]  
D.1.5 Volatile Organic Compounds (VOC) [326 IAC 2-8-4]  
D.1.6 Preventive Maintenance Plan [326 IAC 2-8-4(9)]  
D.1.7 Nonapplicability

**Compliance Determination Requirements**

- D.1.8 Testing Requirements [326 IAC 2-8-5(a)(1),(4)] [326 IAC 2-1.1-11]  
D.1.9 Sulfur Dioxide Emissions and Sulfur Content  
D.1.10 Particulate Matter (PM)

**Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

- D.1.11 Visible Emissions Notations  
D.1.12 Parametric Monitoring  
D.1.13 Baghouse Inspections  
D.1.14 Broken or Failed Bag Detection

**Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

D.1.15 Record Keeping Requirements

D.1.16 Record Keeping [326 IAC 12] [40 CFR 60.110b, Subpart Kb]

D.1.17 Reporting Requirements

D.1.18 NSPS Reporting Requirement

**Certification**

**Emergency Occurrence Report**

**Quarterly Report**

**Quarterly Deviation and Compliance Monitoring Report**

## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in Conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-8-3(b)]

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The Permittee owns and operates a portable hot mix drum asphalt manufacturing source.

Authorized Individual:	Steve Henderson
Source Address:	Portable
Mailing Address:	286 West 300 North, Anderson, Indiana 46012
General Source Phone Number:	765 - 643 - 5358
SIC Code:	2951
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP); Minor Source, under PSD or Emission Offset Rules; Minor Source, Section 112 of the Clean Air Act

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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This portable source consists of the following emission units and pollution control devices:

- (a) One (1) hot mix drum mixer, constructed in 1988, equipped with a baghouse for particulate matter control, exhausting to Stack SV-1, capacity: 250 tons of asphalt per hour.
- (b) One (1) drum/mixer burner, constructed in 1988, firing No. 2 distillate oil as primary fuel, firing natural gas as backup fuel, exhausting to Stack SV-1, rated at 85.0 million British thermal units per hour.
- (c) One (1) hot oil heater, firing No. 2 distillate oil as primary fuel, firing natural gas as backup fuel, exhausting to Stack SV-2, rated at 2.353 million British thermal units per hour.
- (d) Two (2) storage tanks, constructed in 1988, storing liquid asphalt, exhausting to vents SV-3 and SV-4, capacity: 25,000 gallons, each.
- (e) One (1) storage tank, constructed in 1986, storing No. 2 distillate oil, exhausting to vent SV-5, capacity: 8,000 gallons.

### A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(1)]

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This portable source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Paved and unpaved roads and parking lots with public access.
- (b) Four (4) aggregate storage bins.
- (c) One (1) recycled aggregate storage bin.

(d) Three (3) storage piles, total capacity: 18,000 tons.

(e) Materials testing laboratory.

A.4 FESOP Applicability [326 IAC 2-8-2]

This portable source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

## SECTION B GENERAL CONDITIONS

### B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

### B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

### B.3 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

### B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

### B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

### B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

### B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.



The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality.[326 IAC 2-8-4(5)(E)]

- (c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; and
  - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

E & B Paving, Inc.  
Portable  
Permit Reviewer: CJF/MES

Page 10 of 44  
OP No. F 049-14844-03302

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
  - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs), including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

E & B Paving, Inc.  
Portable  
Permit Reviewer: CJF/MES

Page 12 of 44  
OP No. F 049-14844-03302

- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section)  
or,

Telephone No.: 317-233-5674 (ask for Compliance Section)  
Facsimile No.: 317-233-5967

Failure to notify IDEM, OAQ, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

**B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]**

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- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
  - (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

**B.17 Permit Renewal [326 IAC 2-8-3(h)]**

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except

those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:



Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, IN 46206-6015

(b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-8-9]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15]

(a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions

is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) Emission Trades [326 IAC 2-8-15(c)]

The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

- (d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source
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### Emissions Limitations and Standards [326 IAC 2-8-4(1)]

#### C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-3 (Emission Offset) not applicable.
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-3 (Emission Offset), potential to emit particulate matter (PM) from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

#### C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

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The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

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C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

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C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

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C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on December 13, 1996. The plan consists of one or more of the following treatments of unpaved roads and parking lots: paving with asphalt, or treating with emulsified asphalt and calcium chloride, or water on an as-needed basis.

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C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

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C.8 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

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C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.

- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) Procedures for Asbestos Emission Control  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

#### **Testing Requirements [326 IAC 2-8-4(3)]**

##### C.10 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ, not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

**Compliance Requirements [326 IAC 2-1.1-11]**

**C.11 Compliance Requirements [326 IAC 2-1.1-11]**

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

**Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

**C.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]**

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented upon issuance of this permit. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

**C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]**

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

**C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]**

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a temperature or flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading.
- (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

**Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

**C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):



- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

within ninety (90) days from the date of issuance of this permit.

The ERP does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.16 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP).

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.17 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
  - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
  - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend

its Compliance Response Plan to include such response steps taken.

- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
  - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
  - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
  - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
  - (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
  - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
  - (3) An automatic measurement was taken when the process was not operating.
  - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

**C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]**

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

**Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]**

**C.19 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]**

- (a) The Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. This statement must be received in accordance with the compliance schedule specified in 326 IAC 2-6-3 and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8). The statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The emission statement required by this permit shall be considered timely if the date post-marked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

**C.20 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]**

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

**C.21 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]**

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- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) Reporting periods are based on calendar years.

**Portable Source Requirement**

**C.22 Relocation of Portable Sources [326 IAC 2-14-4]**

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- (a) This permit is approved for operation in all areas of Indiana except in severe nonattainment areas for ozone. This determination is based on the requirements Prevention of Significant Deterioration in 326 IAC 2-2 and 40 CFR 52.21, and Emission Offset requirements in 326 IAC 2-3. A thirty (30) day advance notice of relocation must be given to IDEM, OAQ and a "Relocation Site Approval" letter must be obtained before relocating. The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The Permittee shall also notify the applicable local air pollution control agency when relocating to or from one of the following:
  - (1) Madison County - (Anderson Office of Air Management)
  - (2) City of Evansville plus four (4) miles beyond the corporate limits but not outside Vanderburgh County - (Evansville EPA)
  - (3) City of Gary - (Gary Air and Land Pollution Control)
  - (4) City of Hammond - (Hammond Department of Environmental Management)

- (5) Marion County - (Indianapolis Air Pollution Control Agency)
- (6) St. Joseph County - (St. Joseph County Health Department)
- (7) Vigo County - (Vigo County Air Pollution Department)

- (c) That a valid operation permit consists of this document and any subsequent "Relocation Site Approval" letter specifying the current location of the portable plant.

### **Stratospheric Ozone Protection**

#### **C.23 Compliance with 40 CFR 82 and 326 IAC 22-1**

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Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

## SECTION D.1

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-8-4(10)]:

- (a) One (1) hot mix drum mixer, constructed in 1988, equipped with a baghouse for particulate matter control, exhausting to Stack SV-1, capacity: 250 tons of asphalt per hour.
- (b) One (1) drum/mixer burner, constructed in 1988, firing No. 2 distillate oil as primary fuel, firing natural gas as backup fuel, exhausting to Stack SV-1, rated at 85.0 million British thermal units per hour.
- (c) One (1) hot oil heater, firing No. 2 distillate oil as primary fuel, firing natural gas as backup fuel, exhausting to Stack SV-2, rated at 2.353 million British thermal units per hour.
- (d) Two (2) storage tanks, constructed in 1988, storing liquid asphalt, exhausting to vents SV-3 and SV-4, capacity: 25,000 gallons, each.
- (e) One (1) storage tank, constructed in 1986, storing No. 2 distillate oil, exhausting to vent SV-5, capacity: 8,000 gallons.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-8-4(1)]

#### D.1.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

The provisions of 40 CFR 60 Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR 60 Subparts I or Kb.

#### D.1.2 Particulate Matter (PM<sub>10</sub>) [326 IAC 2-8-4] [326 IAC 2-2] [40 CFR 52.21] [326 IAC 2-3]

Pursuant to 326 IAC 2-8-4, PM<sub>10</sub> emissions from the dryer/mixer shall not exceed 16.6 pounds per hour, equivalent to 72.7 tons per year. Compliance with this limit will satisfy 326 IAC 2-8-4. Therefore, the Part 70 rules (326 IAC 2-7) do not apply.

#### D.1.3 Particulate Matter (PM) [40 CFR 60.90] [326 IAC 12] [326 IAC 6-1] [326 IAC 2-2] [40 CFR 52.21] [326 IAC 2-3]

(a) Pursuant to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.90, Subpart I), no owner or operator subject to the provisions of Subpart I shall discharge into the atmosphere from any affected facility any gases which:

- (1) Contain particulate matter in excess of 0.04 grains per dry standard cubic foot, or
- (2) Exhibit twenty (20%) percent opacity, or greater.

(b) Pursuant to 326 IAC 6-1-2, particulate matter emissions from the dryer/mixer shall not exceed 0.03 grains per dry standard cubic foot, equivalent to 7.58 pounds per hour at a flow rate of 42,000 acfm and a temperature of 280 degrees Fahrenheit.

#### D.1.4 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 2-8-4] [326 IAC 7-1.1-1] [326 IAC 7-2-1] [326 IAC 2-2] [40 CFR 52.21] [326 IAC 2-3]



- 
- (a) Pursuant to 326 IAC 2-8-4, the total input of No. 2 fuel oil to the one (1) hot oil heater and the dryer/burner shall be limited to less than 2,808,451 gallons per twelve (12) consecutive month period, which is equivalent to SO<sub>2</sub> emissions of less than 99.7 tons per year.
  - (b) Pursuant to 326 IAC 7-1.1-2, the sulfur content of the No.2 distillate oil shall not exceed five tenth percent (0.5%) by weight. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

**D.1.5 Volatile Organic Compounds (VOC) [326 IAC 2-8-4]**

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This source does not produce cold-mix cutback asphalt. Potential VOC emissions from the production of cold-mix cutback asphalt may subject the source to the requirements of 326 IAC 2-7. Therefore, the Permittee shall not produce cutback asphalt without prior approval from IDEM, OAQ.

**D.1.6 Preventive Maintenance Plan [326 IAC 2-8-4(9)]**

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A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the drum mixer/dryer burner and any control devices.

**D.1.7 Nonapplicability**

- 
- (a) The requirement from F 059-7783-03302, issued on June 17, 1997, Condition D.1.2 to limit the total input of No. 2 fuel oil to the aggregate dryer/mixer and the hot oil heater to less than 2,828,571 gallons per year has not been included in the renewal. Based on the most recent AP-42 emission factors, the total input of No. 2 fuel oil shall be limited to less than 2,808,451 gallons per year. The new limit is included in this FESOP as Condition D.1.4. Thus, Condition D.1.2 of F 059-7783-03302 is hereby rescinded.
  - (b) The requirement from F 059-7783-03302, issued on June 17, 1997, Condition D.1.4 to limit PM<sub>10</sub> emissions to less than 1.82 pounds per hour has not been included in the renewal. The limit was found to be too restrictive, and was changed to 16.6 pounds per hour. The new limit is included in this FESOP as Condition D.1.2. Thus, Condition D.1.4 of F 059-7783-03302 is hereby rescinded.
  - (c) The requirement from F 059-7783-03302, issued on June 17, 1997, Condition D.1.11 limiting the amount and diluent content of the liquid binder used in the production of cold mix cutback asphalt has not been included in the renewal. This source does not produce cutback asphalt. Thus, Condition D.1.11 of F 059-7783-03302 is hereby rescinded.

**Compliance Determination Requirements**

**D.1.8 Testing Requirements [326 IAC 2-8-5(1), (4)] [326 IAC 2-1.1-11]**

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Pursuant to Condition D.1.5 of F 059-7783-03302, issued on June 17, 1997, the Permittee shall perform PM and PM<sub>10</sub> testing in order to demonstrate compliance with Conditions D.1.2 and D.1.3, utilizing methods as approved by the Commissioner. These tests shall be conducted prior to July 2, 2003, and shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. PM<sub>10</sub> includes filterable and condensable PM<sub>10</sub>. Testing shall be conducted in accordance with Section C- Performance Testing.

**D.1.9 Sulfur Dioxide Emissions and Sulfur Content**

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Compliance shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million British thermal units heat input by:

- (1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification; or
- (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
  - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
  - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the 85.0 million British thermal units per hour burner, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

#### D.1.10 Particulate Matter (PM)

In order to comply with Conditions D.1.2 and D.1.3, the baghouse for PM and PM<sub>10</sub> control shall be in operation and control emissions from the drum mixer/dryer at all times that the drum mixer/dryer is in operation and exhausting to the outside atmosphere.

### **Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

#### D.1.11 Visible Emissions Notations

- (a) Visible emission notations of the conveyers, material transfer points and the drum mixer/burner stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

#### D.1.12 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the mixer/dryer, at least once per shift when the drying/mixing process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is

outside the normal range of 2.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### **D.1.13 Baghouse Inspections**

An inspection shall be performed each calendar quarter of all bags controlling the dryer/burner operation when venting to the atmosphere. A baghouse inspection shall be performed within three (3) months of redirecting vents to the atmosphere and every three (3) months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

#### **D.1.14 Broken or Failed Bag Detection**

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B - Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, the material feeding system for the dryer shall cease operation immediately. The associated controlled processes shall be shut down when the material in production has cleared the system. The dryer shall not be operated until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

### **Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

#### **D.1.15 Record Keeping Requirements**

- (a) To document compliance with Conditions D.1.4 and D.1.9, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken daily and shall be complete and sufficient to establish compliance with the SO<sub>2</sub> emission limits established in Condition D.1.4.
  - (1) Calendar dates covered in the compliance determination period;
  - (2) Actual fuel usage of each fuel used since last compliance determination period and equivalent sulfur dioxide emissions;

- (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications;
  - (5) The name of the fuel supplier; and
  - (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.
- (b) To document compliance with Condition D.1.11, the Permittee shall maintain records of visible emission notations of the conveyers, material transfer points and the drum mixer/ burner stack exhaust SV-1 once per shift.
  - (c) To document compliance with Condition D.1.12, the Permittee shall maintain once per shift records of the total static pressure drop during normal operation when venting to the atmosphere.
  - (d) To document compliance with Condition D.1.13, the Permittee shall maintain records of the results of the inspections required under Condition D.1.13.
  - (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.16 Record Keeping [326 IAC 12] [40 CFR 60.110b, Subpart Kb]

The two (2) storage tanks, with capacities 25,000 gallons, each, shall comply with the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.110b, Subpart Kb). These tanks are subject to only 40 CFR Part 60.116b, paragraphs (a) and (b) which requires the Permittee to maintain accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Records shall be kept for the life of the storage tanks.

D.1.17 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.4 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

D.1.18 NSPS Reporting Requirement

Pursuant to the New Source Performance Standards (NSPS), 40 CFR Part 60.90, Subpart I, and 40 CFR Part 60.110b, Subpart Kb, the source owner/operator is hereby advised of the requirement to report the date of performance testing (at least 30 days prior to such date), when required by a condition elsewhere in this permit.

Reports are to be sent to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, IN 46206-6015

The application and enforcement of these standards have been delegated to the IDEM OAQ. The requirements of 40 CFR Part 60 are also federally enforceable.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
CERTIFICATION**

Source Name: E & B Paving, Inc.  
Source Address: Portable  
Mailing Address: 286 West 300 North, Anderson, Indiana 46012  
FESOP No.: F 049-14844-03302

**This certification shall be included when submitting monitoring, testing reports/results  
or other documents as required by this permit.**

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) \_\_\_\_\_
- 9 Report (specify) \_\_\_\_\_
- 9 Notification (specify) \_\_\_\_\_
- 9 Affidavit (specify) \_\_\_\_\_
- 9 Other (specify) \_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE BRANCH  
100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
Phone: 317-233-5674  
Fax: 317-233-5967**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
EMERGENCY OCCURRENCE REPORT**

Source Name: E & B Paving, Inc.  
Source Address: Portable  
Mailing Address: 286 West 300 North, Anderson, Indiana 46012  
FESOP No.: F 049-14844-03302

**This form consists of 2 pages**

**Page 1 of 2**

**9** This is an emergency as defined in 326 IAC 2-7-1(12)  
CThe Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and  
CThe Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

**Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency?    Y    N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

A certification is not required for this report.



E & B Paving, Inc.  
Portable  
Permit Reviewer: CJF/MES

Page 41 of 44  
OP No. F 049-14844-03302

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**FESOP Quarterly Report**

Source Name: E & B Paving, Inc.  
Source Address: Portable  
Mailing Address: 286 West 300 North, Anderson, Indiana 46012  
FESOP No.: F 049-14844-03302  
Facilities: The one (1) hot oil heater and the aggregate dryer/burner  
Parameter: Gallons of No. 2 oil burned  
Limit: Less than 2,808,451 gallons per twelve (12) consecutive month period, equivalent to SO<sub>2</sub> emissions less than 99.7 tons per year

YEAR: \_\_\_\_\_

Month	Gallons of No. 2 oil burned	Gallons of No. 2 oil burned	Gallons of No. 2 oil burned
	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: E & B Paving, Inc.  
Source Address: Portable  
Mailing Address: 286 West 300 North, Anderson, Indiana 46012  
FESOP No.: F 049-14844-03302

Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

**Permit Requirement** (specify permit condition #)

**Date of Deviation:**

**Duration of Deviation:**

**Number of Deviations:**

**Probable Cause of Deviation:**

**Response Steps Taken:**

**Permit Requirement** (specify permit condition #)

**Date of Deviation:**

**Duration of Deviation:**

**Number of Deviations:**

**Probable Cause of Deviation:**

**Response Steps Taken:**

<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Form Completed By: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

Indiana Department of Environmental Management  
Office of Air Quality

Technical Support Document (TSD)  
for a Federally Enforceable State Operating Permit (FESOP) Renewal

**Source Background and Description**

<b>Source Name:</b>	<b>E &amp; B Paving, Inc.</b>
<b>Source Location:</b>	<b>Portable (currently located at the southeast corner of CR 100S and 600W near Kewanna, Fulton County, Indiana)</b>
<b>SIC Code:</b>	<b>2951</b>
<b>Operation Permit No.:</b>	<b>F 049-14844-03302</b>
<b>Permit Reviewer:</b>	<b>Craig J. Friederich</b>

The Office of Air Quality (OAQ) has reviewed a FESOP renewal application from E & B Paving, Inc. relating to the operation of a portable hot mix drum asphalt manufacturing source. E & B Paving, Inc. was issued FESOP 059-7783-03302, on June 17, 1997.

**Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) hot mix drum mixer, constructed in 1988, equipped with a baghouse for particulate matter control, exhausting to Stack SV-1, capacity: 250 tons of asphalt per hour.
- (b) One (1) drum/mixer burner, constructed in 1988, firing No. 2 distillate oil as primary fuel, firing natural gas as backup fuel, exhausting to Stack SV-1, rated at 85.0 million British thermal units per hour.
- (c) One (1) hot oil heater, firing No. 2 distillate oil as primary fuel, firing natural gas as backup fuel, exhausting to Stack SV-2, rated at 2.353 million British thermal units per hour.
- (d) Two (2) storage tanks, constructed in 1988, storing liquid asphalt, exhausting to vents SV-3 and SV-4, capacity: 25,000 gallons, each.
- (e) One (1) storage tank, constructed in 1986, storing No. 2 distillate oil, exhausting to vent SV-5, capacity: 8,000 gallons.

**Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted facilities operating at this source during this review process.

**New Emission Units and Pollution Control Equipment Receiving New Source Review Approval**

There are no new facilities proposed at this source during this review process.

### Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Paved and unpaved roads and parking lots with public access.
- (b) Four (4) aggregate storage bins.
- (c) One (1) recycled aggregate storage bin.
- (d) Three (3) storage piles, total capacity: 18,000 tons.
- (e) Materials testing laboratory.

### Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

FESOP F 059-7783-03302, issued on June 17, 1997.

All conditions from previous approvals were incorporated into this FESOP except the following:

- (a) FESOP 059-7783-03302, issued on June 17, 1997  
Condition D.1.2, the requirement to limit the total input of No. 2 fuel oil to the aggregate dryer/mixer and the hot oil heater to less than 2,828,571 gallons per year.

Reason not incorporated: Based on the most recent AP-42 emission factors, the total input of No. 2 fuel oil shall be limited to less than 2,808,451 gallons per twelve (12) consecutive month period, in order to limit SO<sub>2</sub> emissions from the entire source to less than one hundred (100) tons per year.

- (b) FESOP 059-7783-03302, issued on June 17, 1997  
Condition D.1.4, the requirement to limit PM<sub>10</sub> emissions from the aggregate dryer/mixer to less than 1.82 pounds per hour.

Reason not incorporated: Based on the potential to emit from other facilities at this source, the aggregate dryer/mixer can emit more than 1.82 pounds per hour and still limit PM<sub>10</sub> emissions from the entire source to less than one hundred (100) tons per year. The PM<sub>10</sub> limit has been changed to 16.6 pounds per hour. Based on the results of the stack test performed July 2, 1998, the source will comply with this limit.

- (c) FESOP 059-7783-03302, issued on June 17, 1997  
Condition D.1.11, the requirement limiting the amount and diluent content of the liquid binder used in the production of cold mix cutback asphalt.

Reason not incorporated: This source does not produce cutback asphalt.

- (d) FESOP 059-7783-03302, issued on June 17, 1997  
The frequency of the visible emissions notations required by Condition D.1.8 has been changed from daily to once per shift.

Reason: IDEM, OAQ, has determined that daily compliance monitoring is not sufficient to monitor continuous compliance with the applicable rules for these types of operations.

Therefore, visible emissions will be required once per shift in the proposed permit.

### Enforcement Issue

There are no enforcement actions pending.

### Recommendation

The staff recommends to the Commissioner that the FESOP Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP Renewal application for the purposes of this review was received on September 7, 2001.

There was no notice of completeness letter mailed to the source.

### Emission Calculations

See pages 1 through 13 of 13 of Appendix A of this document for detailed emissions calculations.

### Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source, excluding the emission limits that were contained in the previous FESOP.

Pollutant	Unrestricted Potential Emissions (tons/year)
PM	30,931
PM <sub>10</sub>	7,176
SO <sub>2</sub>	194
VOC	2.10
CO	32.1
NO <sub>x</sub>	54.7

Note: For the purpose of determining Title V applicability for particulates, PM<sub>10</sub>, not PM, is the regulated pollutant in consideration.

HAPS	Potential To Emit (tons/year)
TOTAL HAPS *	8.32

\* HAPS include benzene, ethyl benzene, formaldehyde, methyl chloroform, naphthalene, toluene, xylene; arsenic, cadmium, chromium, manganese, mercury and nickel compounds. No single HAP exceeds a potential to emit of greater than ten (10) tons per year.

The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM<sub>10</sub> and SO<sub>2</sub> is equal to or greater than one hundred (100) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

### Potential to Emit After Issuance

The source, issued a FESOP on June 17, 1997, has opted to remain a FESOP source, rather than apply for a Part 70 Operating Permit. The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered enforceable only after issuance of the Federally Enforceable State Operating Permit and only to the extent that the effect of the control equipment is made practically enforceable in the permit. Since the source has not constructed any new emission units, the source's potential to emit is based on the emission units included in the original FESOP (F 059-7783-03302, issued on June 17, 1997).

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPS
Drum Dryer/Burner and Hot Oil Heater (Worst Case)	33.2	72.7	99.7	2.11	32.1	54.7	8.32
Conveying/Handling	14.4	1.44	-	-	-	-	-
Screening	33.1	3.31	-	-	-	-	-
Storage Piles	0.040	0.014	-	-	-	-	-
Unpaved Roads	109	22.4	-	-	-	-	-
Insignificant Activities	-	-	-	-	-	-	-
Total Emissions	190 including fugitive	Less than 100	99.7	2.11	32.1	54.7	Single less than 10 Total less than 25

The PM value for the Drum Mixer/Burner represents the allowable emissions pursuant to 326 IAC 6-1 (Particulate Matter; Non-attainment Area Limitations).

The total amount of No. 2 fuel oil used at the one (1) hot oil heater and the dryer/burner shall be limited to less than 2,808,451 gallons per twelve (12) consecutive month period, which is equivalent to an SO<sub>2</sub> limit of less than 99.7 tons per year. The full SO<sub>2</sub> potential emission rate of 0.229 tons per year from the one (1) hot oil heater and the dryer/burner when burning natural gas has been assumed in computing this limit, thereby making fuel equivalencies for natural gas unnecessary for the purposes of determining compliance based on SO<sub>2</sub> emissions.

### County Attainment Status

The source is currently located in Fulton County. The source can operate in all areas of the state except any county classified as severe or extreme nonattainment for ozone.



Pollutant	Status
PM <sub>10</sub>	Attainment
SO <sub>2</sub>	Attainment
NO <sub>2</sub>	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Fulton County has been designated as attainment or unclassifiable for ozone.

#### Portable Source

- (a) Location  
This is a portable source and its current location is the southeast corner of CR 100S and 600W near Kewanna, Fulton County, Indiana.
- (b) PSD and Emission Offset Requirements  
The emissions for this portable source were reviewed under the requirements of the Prevention of Significant Deterioration (PSD), 326 IAC 2-2, 40 CFR 52.21, and Emission Offset, 326 IAC 2-3.
- (c) Fugitive Emissions  
Although this type of operation is not one of the twenty-eight (28) listed sources under 326 IAC 2-2, there are applicable New Source Performance Standards that were in effect on August 7, 1980. Therefore, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are counted toward determination of PSD and Emission Offset applicability.

Since unpaved roads are not an affected facility of the applicable NSPS (40 CFR 60.90, Subpart I), fugitive PM emissions resulting from unpaved roads are not counted toward determination of PSD and Emission Offset applicability.

#### Federal Rule Applicability

- (a) This asphalt plant is still subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.90, Subpart I), because it was constructed after June 11, 1973. No owner or operator subject to the provisions of Subpart I shall discharge into the atmosphere from any affected facility any gases which:
  - (1) contain particulate matter in excess of 0.04 grains per dry standard cubic foot; or
  - (2) exhibit 20 percent opacity, or greater.

Compliance with the requirements of 326 IAC 6-1 will ensure compliance with NSPS Subpart I.

- (b) The two (2) storage tanks, constructed in 1988, with capacities of 25,000 gallons, each, are still subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.110b, Subpart Kb) because the tanks have a capacity greater than forty (40) cubic meters, and were constructed after July 23, 1984. Since the materials stored in these tanks have a vapor pressure less than 15.0 kiloPascals, these tanks are only subject to 40 CFR Part 60.116b, paragraphs (a) and (b), which require record keeping.
- (c) The 8,000 gallon fuel oil storage tank, constructed in 1986, is not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.110b, Subpart Kb) because the tank has a capacity less than forty (40) cubic meters.
- (d) There are still no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 40 CFR Parts 61, 62 and 63) applicable to this source.

#### **State Rule Applicability - Entire Source**

##### **326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-3 (Emission Offset)**

This source was constructed after August 7, 1977. The limited potential to emit of PM, PM<sub>10</sub>, and SO<sub>2</sub> from the entire source, excluding fugitive PM emissions from unpaved roads, are each less than one hundred (100) tons per year. PM emissions are limited by the requirements of 326 IAC 6-1. PM<sub>10</sub> and SO<sub>2</sub> are limited under 326 IAC 2-8-4. Therefore, the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset) are not applicable, and this source is a minor source with respect to these rules.

##### **326 IAC 2-6 (Emission Reporting)**

This portable source is subject to 326 IAC 2-6 (Emission Reporting) because it is a portable asphalt plant that can re-locate to one of the counties specified in 326 IAC 2-6-1. Pursuant to this rule, the owner/operator of the source must submit an emission statement for the source. The statement must be received in accordance with the compliance schedule specified in 326 IAC 2-6 and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8).

##### **326 IAC 2-8-4 (FESOP)**

Pursuant to this rule, the amount of PM<sub>10</sub> and SO<sub>2</sub> shall be limited to less than one hundred (100) tons per year. Therefore, the requirements of 326 IAC 2-7, do not apply.

- (a) The total amount of No. 2 fuel oil used at the one (1) hot oil heater and the dryer/burner shall be limited to less than 2,808,451 gallons per twelve (12) consecutive month period, which is equivalent to an SO<sub>2</sub> limit of less than 99.7 tons per year (see page 12 of 13 of Appendix A). The full SO<sub>2</sub> potential emission rate of 0.229 tons per year from the one (1) hot oil heater and the dryer/burner when burning natural gas has been assumed in computing this limit, thereby making fuel equivalencies for natural gas unnecessary for the purposes of determining compliance based on SO<sub>2</sub> emissions.
- (b) PM<sub>10</sub> emissions from the aggregate dryer/mixer shall not exceed 16.6 pounds per hour, equivalent to 72.7 tons per year.
- (c) The unrestricted potential to emit NO<sub>x</sub> is less than one-hundred (100) tons per year, when using any of the fuels, including using natural gas for each hour of the year or natural gas in combination with any of the other fuels. Therefore, no 326 IAC 2-8-4 (FESOP) limit is

required for NO<sub>x</sub> emissions.

Compliance with the above limits will make the requirements of 326 IAC 2-7 not applicable.

#### 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### 326 IAC 6-4 (Fugitive Dust Emissions Limitations)

This rule requires that the source not generate fugitive dust to the extent that some portion of the material escapes beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located.

#### 326 IAC 6-5 (Fugitive Particulate Emissions Limitations)

This rule requires a fugitive dust plan to be submitted. The plan, submitted on December 13, 1996, consists of one or more of the following treatments of unpaved roads and parking lots: paving with asphalt, or treating with emulsified asphalt and calcium chloride, or water on an as-needed basis. The source shall comply with all dust abatement measures contained therein.

### **State Rule Applicability - Individual Facilities**

#### 326 IAC 6-1-2 (Particulate Matter; Non-attainment Area Limitations)

Pursuant to 326 IAC 6-1-2, particulate matter emissions from this portable asphalt plant shall not exceed 0.03 grains per dry standard cubic foot, equivalent to 7.58 pounds per hour at a flow rate of 42,000 actual cubic feet per minute and a temperature of 280 degrees Fahrenheit. Compliance with this limit will ensure compliance with the 0.04 grains per dry standard cubic foot limit prescribed by NSPS Subpart I.

#### 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations)

The one (1) drum/mixer burner, firing No.2 distillate oil, rated at 85.0 million British thermal units per hour, is subject to the requirements of 326 IAC 7-1.1, since the potential to emit SO<sub>2</sub> is greater than twenty-five (25) tons per year. Pursuant to this rule, sulfur dioxide emissions from the combustion of No. 2 distillate fuel oil shall not exceed 0.5 pounds per million British thermal units heat input (the equivalent of 0.5 percent sulfur content at a higher heating value of 140,000 British thermal units per gallon and a maximum heat input rate of 85.0 million British thermal units per hour).

#### 326 IAC 7-2-1 (Sulfur Dioxide Compliance: reporting and methods to determine compliance)

Reports of calendar month or annual average sulfur content, heat content, fuel consumption, and

sulfur dioxide emission rate shall be provided upon request to the Office of Air Quality.

### Testing Requirements

All testing requirements from the previous approval were incorporated into this FESOP.

A stack test for PM and PM<sub>10</sub> emissions to determine compliance with 40 CFR 60, Subpart I and 326 IAC 2-8-4 was performed July 2, 1998. The test showed that the hot mix asphalt plant is not in compliance with its PM<sub>10</sub> limit, but only because the PM<sub>10</sub> limit in FESOP 059-7783-03302 was too restrictive. According to the test, the company was in compliance with the PM limit of 0.03 grains per dry standard cubic foot.

PM and PM<sub>10</sub> testing is required for the drum mixer and dryer/burner stack exhaust SV-1 prior to July 2, 2003 in order to assure compliance with 326 IAC 6-1, NSPS Subpart I, and 326 IAC 2-8-4.

### Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

All compliance requirements from previous approvals were incorporated into this FESOP. The compliance monitoring requirements applicable to this source are as follows:

The aggregate dryer/burner has applicable compliance monitoring conditions as specified below:

- (a) Visible emissions notations of the baghouse used in conjunction with the aggregate dryer/burner shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.
- (b) The Permittee shall record the total static pressure drop across the baghouse controlling the aggregate dryer/burner, at least once per shift when the aggregate dryer/burner is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 6.0 inches of water or a range established during the latest

stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports.

- (c) An inspection shall be performed each calendar quarter of all bags controlling the drum mixer operation when venting to the atmosphere. A baghouse inspection shall be performed within three (3) months of redirecting vents to the atmosphere and every three (3) months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.
- (d) In the event that bag failure has been observed:
  - (1) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this proposed permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
  - (2) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this proposed permit (Section B - Emergency Provisions).

These monitoring conditions are necessary because the baghouse for the aggregate dryer/burner must operate properly to ensure compliance with 326 IAC 6-1 (Nonattainment Area Particulate Matter Limitations), 326 IAC 5-1 (Opacity), 326 IAC 2-8 (FESOP) and NSPS Subpart I.

## **Conclusion**

The operation of this portable hot mix drum asphalt manufacturing source shall be subject to the conditions of the attached proposed FESOP No.: F 049-14844-03302.

## Appendix A: Emission Calculations

**Company Name:** E & B Paving, Inc.  
**Plant Location:** Portable  
**County:** Portable  
**FESOP:** F 049-14844  
**Plt. ID:** 049-03302  
**Date:** September 7, 2001  
**Permit Reviewer:** Craig J. Friederich

### I. Potential Emissions

#### A. Source emissions before controls

<p style="text-align: center;"><b>Hot Oil Heater on Oil (oil/&lt;100MMBTU/uncontrolled)</b></p> <p>The following calculations determine the amount of emissions created by #2 &amp; #1 distillate fuel oil @ <u>0.500</u> % sulfur, based on 8760 hours of use and AP-42, Tables 1.3-1, 1.3-2, 1.3-3</p> <p>Pollutant: <u>2.353</u> MMBtu/hr * 8760 hrs/yr      * Ef (lbs/1000 gal) = (tons/yr)  <b>140000.0</b> Btu/gal * 2000 lbs/ton</p> <p>                         P M:                      2.0 lbs/1000 gal =                      <u>0.147</u> tons/yr                          PM-10:                   3.3 lbs/1000 gal =                      <u>0.243</u> tons/yr                          S O x:                    71.0 lbs/1000 gal =                      <u>5.227</u> tons/yr                          N O x:                    20.0 lbs/1000 gal =                      <u>1.472</u> tons/yr                          V O C:                    0.34 lbs/1000 gal =                      <u>0.025</u> tons/yr                          C O:                        5.0 lbs/1000 gal =                      <u>0.368</u> tons/yr                     </p>	<p style="text-align: center;"><b>Hot Oil Heater                      (butane)</b></p> <p>The following calculations determine the amount of emissions created by butane gas @ <u>0.20</u> grains sulfur per 100 cubic feet, based on 8760 hours of use and AP-42 Ch. 1.5, Table 1.5-1</p> <p><u>0.000</u> MMBtu/hr * 8760 hrs/yr                      * Ef (lbs/1000 gal) = (tons/yr)  <b>102600.0</b> Btu/gal * 2000 lbs/ton</p> <p>                         P M:                      0.5 lbs/1000 gal =                      <u>0.000</u> tons/yr                          PM-10:                   0.5 lbs/1000 gal =                      <u>0.000</u> tons/yr                          S O x:                    0.02 lbs/1000 gal =                      <u>0.000</u> tons/yr                          N O x:                    15.0 lbs/1000 gal =                      <u>0.000</u> tons/yr                          V O C:                    0.60 lbs/1000 gal =                      <u>0.000</u> tons/yr                          C O:                        2.1 lbs/1000 gal =                      <u>0.000</u> tons/yr                     </p>
<p style="text-align: center;"><b>Hot Oil Heater on Gas (gas/&lt;100MMBTU/uncontrolled)</b></p> <p>The following calculations determine the amount of emissions created by natural gas combustion, based on 8760 hours of use, AP-42 Ch. 1.4, Tables 1.4-1, 1.4-2, 1.4-3</p> <p>Pollutant: <u>2.353</u> MMBtu/hr * 8760 hrs/yr      * Ef (lbs/MMcf) = (tons/yr)  <u>1000</u> Btu/cf * 2000 lbs/ton</p> <p>                         P M:                      1.9 lbs/MMcf =                      <u>0.020</u> tons/yr                          P M-10:                   7.6 lbs/MMcf =                      <u>0.078</u> tons/yr                          S O x:                    0.6 lbs/MMcf =                      <u>0.006</u> tons/yr                          N O x:                    100.0 lbs/MMcf =                      <u>1.031</u> tons/yr                          V O C:                    5.5 lbs/MMcf =                      <u>0.057</u> tons/yr                          C O:                        84.0 lbs/MMcf =                      <u>0.866</u> tons/yr                     </p>	<p style="text-align: center;"><b>Hot Oil Heater                      (propane)</b></p> <p>The following calculations determine the amount of emissions created by propane gas @ <u>0.20</u> grains sulfur per 100 cubic feet, based on 8760 hours of use and AP-42 Ch. 1.5, Table 1.5-1</p> <p><u>0.000</u> MMBtu/hr * 8760 hrs/yr                      * Ef (lbs/1000 gal) = (tons/yr)  <b>91500.0</b> Btu/gal * 2000 lbs/ton</p> <p>                         P M:                      0.4 lbs/1000 gal =                      <u>0.000</u> tons/yr                          PM-10:                   0.4 lbs/1000 gal =                      <u>0.000</u> tons/yr                          S O x:                    0.02 lbs/1000 gal =                      <u>0.000</u> tons/yr                          N O x:                    14.0 lbs/1000 gal =                      <u>0.000</u> tons/yr                          V O C:                    1.90 lbs/1000 gal =                      <u>0.000</u> tons/yr                          C O:                        3.2 lbs/1000 gal =                      <u>0.000</u> tons/yr                     </p>

**Dryer Burner (gas/<100MMBTU/uncontrolled)**

The following calculations determine the amount of emissions created by natural gas combustion, based on 8760 hours of use, AP-42 Ch. 1.4, Tables 1.4-1, 1.4-2, 1.4-3

Pollutant:	<b>85.000</b> MMBtu/hr * 8760 hrs/yr 1000 Btu/cf * 2000 lbs/ton	* Ef (lbs/MMcf) = (tons/yr)
P M:	1.9 lbs/MMcf =	<b>0.7074</b> tons/yr
P M-10:	7.6 lbs/MMcf =	<b>2.829</b> tons/yr
S O x:	0.6 lbs/MMcf =	<b>0.223</b> tons/yr
N O x:	100.0 lbs/MMcf =	<b>37.2300</b> tons/yr
V O C:	5.5 lbs/MMcf =	<b>2.048</b> tons/yr
C O:	84.0 lbs/MMcf =	<b>31.273</b> tons/yr

**Dryer Burner (gas/>100MMBTU/uncontrolled)**

The following calculations determine the amount of emissions created by natural gas combustion, based on 8760 hours of use, AP-42 Ch. 1.4, Tables 1.4-1, 1.4-2, 1.4-3

Pollutant:	<b>0.000</b> MMBtu/hr * 8760 hrs/yr 1000 Btu/cf * 2000 lbs/ton	* Ef (lbs/MMcf) = (tons/yr)
P M:	1.9 lbs/MMcf =	<b>0.000</b> tons/yr
P M-10:	7.6 lbs/MMcf =	<b>0.000</b> tons/yr
S O x:	0.6 lbs/MMcf =	<b>0.000</b> tons/yr
N O x:	190.0 lbs/MMcf =	<b>0.00</b> tons/yr
V O C:	5.5 lbs/MMcf =	<b>0.000</b> tons/yr
C O:	84.0 lbs/MMcf =	<b>0.000</b> tons/yr

Post-NSPS = 190

**Dryer Burner (gas/>100MMBTU/low nox)**

The following calculations determine the amount of emissions created by natural gas combustion, based on 8760 hours of use, AP-42 Ch. 1.4, Tables 1.4-1, 1.4-2, 1.4-3 (low NOx burner = 140, flue gas recirculation = 100)

Pollutant:	<b>0.000</b> MMBtu/hr * 8760 hrs/yr 1000 Btu/cf * 2000 lbs/ton	* Ef (lbs/MMcf) = (tons/yr)
P M:	1.9 lbs/MMcf =	<b>0.000</b> tons/yr
P M-10:	7.6 lbs/MMcf =	<b>0.000</b> tons/yr
S O x:	0.6 lbs/MMcf =	<b>0.000</b> tons/yr
N O x:	140.0 lbs/MMcf =	<b>0.000</b> tons/yr
V O C:	5.5 lbs/MMcf =	<b>0.000</b> tons/yr
C O:	84.0 lb/MMcf =	<b>0.000</b> tons/yr

**Dryer Burner (#2 oil)**

**<100 MMBtu/hr**

The following calculations determine the amount of emissions created by #2 & #1 distillate fuel oil @ **0.500** % sulfur, based on 8760 hours of use and AP-42, Tables 1.3-1, 1.3-2, 1.3-3

Pollutant:	<b>85.0</b> MMBtu/hr * 8760 hrs/yr <b>140000.0</b> Btu/gal * 2000 lbs/ton	* Ef (lbs/1000 gal) = (tons/yr)
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If Rating >100 mmBt	P M:	2.0 lbs/1000 gal =	<b>5.319</b> tons/yr
	PM-10:	3.3 lbs/1000 gal =	<b>8.776</b> tons/yr
	S O x:	71.0 lbs/1000 gal =	<b>188.809</b> tons/yr
	N O x:	20.0 lbs/1000 gal =	<b>53.186</b> tons/yr
	V O C:	0.34 lbs/1000 gal =	<b>0.904</b> tons/yr
	C O:	5.0 lbs/1000 gal =	<b>13.296</b> tons/yr

**Dryer Burner (#4 oil/ <100MMBTU)**

The following calculations determine the amount of emissions created by #4 distillate  
 fuel oil @ 0.5 % sulfur, based on 8760 hours of use and AP-42, Tables 1.3-1, 1.3-2, 1.3-3

Pollutant:	<u>0.000</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)
	<u>138000.0</u> Btu/gal * 2000 lbs/ton	
P M:	2.0 lbs/1000 gal =	<u>0.000</u> tons/yr
PM-10:	3.3 lbs/1000 gal =	<u>0.000</u> tons/yr
S O x:	71.0 lbs/1000 gal =	<u>0.000</u> tons/yr
N O x:	20.0 lbs/1000 gal =	<u>0.000</u> tons/yr
V O C:	0.34 lbs/1000 gal =	<u>0.000</u> tons/yr
C O:	5.0 lbs/1000 gal =	<u>0.000</u> tons/yr

**Dryer Burner (#4 oil/ >100MMBTU)**

The following calculations determine the amount of emissions created by #4 distillate  
 fuel oil @ 0.500 % sulfur, based on 8760 hours of use and AP-42, Tables 1.3-1, 1.3-2, 1.3-3

Pollutant:	<u>0.0</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)
	<u>138000.0</u> Btu/gal * 2000 lbs/ton	
P M:	2.0 lbs/1000 gal =	<u>0.000</u> tons/yr
PM-10:	3.3 lbs/1000 gal =	<u>0.000</u> tons/yr
S O x:	75.0 lbs/1000 gal =	<u>0.000</u> tons/yr
N O x:	24.0 lbs/1000 gal =	<u>0.000</u> tons/yr
V O C:	0.20 lbs/1000 gal =	<u>0.000</u> tons/yr
C O:	5.0 lbs/1000 gal =	<u>0.000</u> tons/yr

**Dryer Burner (waste oil/ vaporizing burner)**

The following calculations determine the amount of emissions created by waste  
 fuel oil @ 0.500 % sulfur, based on 8760 hours of use and AP-42, Chapter 1.11

Pollutant:	<u>0.0</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)
	<u>0.0</u> Btu/gal * 2000 lbs/ton	
P M:	0.0 lbs/1000 gal =	<u>0.000</u> tons/yr
P M-10:	0.0 lbs/1000 gal =	<u>0.000</u> tons/yr
S O x:	50.0 lbs/1000 gal =	<u>0.000</u> tons/yr
N O x:	11.0 lbs/1000 gal =	<u>0.000</u> tons/yr
VOC	1.0 lbs/1000 gal =	<u>0.000</u> tons/yr
C O:	1.7 lbs/1000 gal =	<u>0.000</u> tons/yr
Pb:	0.0 lbs/1000 gal =	<u>0.000</u> tons/yr

0.000 % Ash  
0.000 % Lead



**Dryer Burner (waste oil/atomizing burner)**

The following calculations determine the amount of emissions created by waste  
fuel oil @ 1.000 % sulfur, based on 8760 hours of use and AP-42 Chapter 1.11

1.000  
0.010

% Ash  
% Lead

Pollutant:	<u>0.000</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)
	<u>142000.000</u> Btu/gal * 2000 lbs/ton	
P M:	66.0 lbs/1000 gal =	<u>0.000</u> tons/yr
P M-10:	57.0 lbs/1000 gal =	<u>0.000</u> tons/yr
S O x:	107.0 lbs/1000 gal =	<u>0.000</u> tons/yr
N O x:	16.0 lbs/1000 gal =	<u>0.000</u> tons/yr
VOC:	1.0 lbs/1000 gal =	<u>0.000</u> tons/yr
C O:	2.10 lbs/1000 gal =	<u>0.000</u> tons/yr
Pb:	0.50 lbs/1000 gal =	<u>0.000</u> tons/yr

**Dryer Burner (butane)**

The following calculations determine the amount of emissions created by butane  
gas @ 0.20 grains sulfur per 100 cubic feet, based on 8760 hours of use and AP-42, Table 1.5-1

Pollutant:	<u>0.000</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)
	<u>102600.0</u> Btu/gal * 2000 lbs/ton	
P M:	0.6 lbs/1000 gal =	<u>0.000</u> tons/yr
PM-10:	0.6 lbs/1000 gal =	<u>0.000</u> tons/yr
S O x:	0.02 lbs/1000 gal =	<u>0.000</u> tons/yr
N O x:	21.0 lbs/1000 gal =	<u>0.000</u> tons/yr
V O C:	0.26 lbs/1000 gal =	<u>0.000</u> tons/yr
C O:	3.6 lbs/1000 gal =	<u>0.000</u> tons/yr

**Dryer Burner (propane)**

The following calculations determine the amount of emissions created by propane  
gas @ 0.20 grains sulfur per 100 cubic feet, based on 8760 hours of use and AP-42, Table 1.5-1

Pollutant:	<u>0.000</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)
	<u>91500.0</u> Btu/gal * 2000 lbs/ton	
P M:	0.6 lbs/1000 gal =	<u>0.000</u> tons/yr
PM-10:	0.6 lbs/1000 gal =	<u>0.000</u> tons/yr
S O x:	0.02 lbs/1000 gal =	<u>0.000</u> tons/yr
N O x:	19.0 lbs/1000 gal =	<u>0.000</u> tons/yr
V O C:	0.25 lbs/1000 gal =	<u>0.000</u> tons/yr
C O:	3.2 lbs/1000 gal =	<u>0.000</u> tons/yr

**\*\* aggregate drying: drum-mix plant \*\***

The following calculations determine the amount of emissions created by aggregate drying, based on 8760 hours of use and AP-42, Chapter 11.1, Table 11.1-3, rev. 12/00

P M:	28 lbs/ton x	<u>250.0</u>	tons/hr x	8760 hrs/yr =	<u>30660.000</u> tons/yr
		2000	lbs/ton		
P M-10:	6.5 lbs/ton x	<u>250</u>	tons/hr x	8760 hrs/yr =	<u>7117.500</u> tons/yr
		2000	lbs/ton		
Lead:	3.30E-06 lbs/ton x	<u>250</u>	tons/hr x	8760 hrs/yr =	<u>0.004</u> tons/yr
		2000	lbs/ton		
HAPs:	0.0076 lbs/ton x	<u>250</u>	tons/hr x	8760 hrs/yr =	<u>8.322</u> tons/yr
		2000	lbs/ton		

HAPs include benzene, ethylbenzene, formaldehyde, methyl chloroform, naphthalene, toluene, xylene; arsenic, cadmium, chromium, manganese, mercury, and nickel compounds.

**\*\* aggregate drying: batch-mix plant \*\***

The following calculations determine the amount of emissions created by aggregate drying, based on 8760 hours of use and EPA SCC #3-05-002-05:

P M:	32 lbs/ton x	<u>0.0</u>	tons/hr x	8760 hrs/yr =	<u>0.0</u> tons/yr
		2000	lbs/ton		
P M-10:	4.5 lbs/ton x	<u>0</u>	tons/hr x	8760 hrs/yr =	<u>0.0</u> tons/yr
		2000	lbs/ton		
Lead:	3.30E-06 lbs/ton x	<u>0</u>	tons/hr x	8760 hrs/yr =	<u>0.000</u> tons/yr
		2000	lbs/ton		
HAPs:	0.0076 lbs/ton x	<u>0</u>	tons/hr x	8760 hrs/yr =	<u>0.000</u> tons/yr
		2000	lbs/ton		

HAPs include benzene, ethylbenzene, formaldehyde, methyl chloroform, naphthalene, toluene, xylene; arsenic, cadmium, chromium, manganese, mercury, and nickel compounds.

**\*\* conveying / handling \*\***

The following calculations determine the amount of emissions created by material handling of aggregate, based on 8760 hours of use and AP-42, Ch 11.19.2

$$E_f = .0032^* \frac{(U/5)^{1.3} * k}{(M/2)^{1.4}} = \underline{\underline{0.014}} \text{ lbs/ton}$$

where k= 1 (particle size multiplier)  
U = 12 mph mean wind speed (worst case)  
M = 1.6 % moisture

P M :	<u>0.014</u> lbs/ton x	<u>240.00</u> tons/hr x	8760 hrs/yr =	<u>14.348</u> tons/yr	
		2000 lbs/ton			
P M-10:	10% of PM =			<u>1.435</u> tons/yr	
<b>Screening</b>	PM: <u>240.00</u> tons/hr x	0.0315 lbs/ton	/ 2000 lbs/ton x	8760 hrs/yr =	<u>33.113</u> tons/yr
	P M-10: 10% of PM =			<u>3.311</u> tons/yr	AP-42 Ch.11.19.2

**\*\* unpaved roads \*\***

The following calculations determine the amount of emissions created by vehicle traffic on unpaved roads, based on 8760 hours of use and AP-42, Ch 11.2.1.

**A. Tri-axle Truck**

12.20	trips/hr x				
0.080	miles/roundtrip x				
8760	hrs/yr =		8549.8	miles per year	
<b>For PM</b>		<b>For PM-10</b>			
8.89		$E_f = \{k^*[(s/12)^{0.8}]^*[(W/3)^b]/[(Mdry/0.2)^c] * [(365-p)/365]$			
10		=	1.88	lb/mile	
4.8		where k =	2.6	(particle size multiplier for PM-10) (k=10 for PM-30 or TSP)	
0.5		s =	4.8	mean % silt content of unpaved roads	
0.4		b =	0.4	Constant for PM-10 (b = 0.5 for PM-30 or TSP)	
23.75		c =	0.3	Constant for PM-10 (c = 0.4 for PM-30 or TSP)	
0.2		W =	23.75	tons average vehicle weight	
125		Mdry =	0.2	surface material moisture content, % (default is 0.2 for dry conditions)	
		p =	125	number of days with at least 0.254mm of precipitation (See Figure 13.2.2-1)	
		8.89 lb/mi x	8549.76	mi/yr =	PM 38.00 tons/yr
			2000	lb/ton	
		1.88 lb/mi x	8549.76	mi/yr =	PM-10 8.03 tons/yr
			2000	lb/ton	

**B. Front End Loader**

28.20	trips/hr x				
0.136	miles/roundtrip x				
8760	hrs/yr =		33596.4	miles per year	
<b>For PM</b>		<b>For PM-10</b>			
10.74		$E_f = \{k^*[(s/12)^{0.8}]^*[(W/3)^b]/[(Mdry/0.2)^c] * [(365-p)/365]$			
10		=	2.19	lb/mile	
4.8		where k =	2.6	(particle size multiplier for PM-10) (k=10 for PM-30 or TSP)	
0.5		s =	4.8	mean % silt content of unpaved roads	
0.4		b =	0.4	Constant for PM-10 (b = 0.5 for PM-30 or TSP)	
34.65		c =	0.3	Constant for PM-10 (c = 0.4 for PM-30 or TSP)	
0.2		W =	34.65	tons average vehicle weight	
125		Mdry =	0.2	surface material moisture content, % (default is 0.2 for dry conditions)	
		p =	125	number of days with at least 0.254mm of precipitation (See Figure 13.2.2-1)	
		10.74 lb/mi x	33596.352	mi/yr =	PM 180.35 tons/yr
			2000	lb/ton	
		2.19 lb/mi x	33596.352	mi/yr =	PM-10 36.71 tons/yr
			2000	lb/ton	

**C. Semi Truck**

0.0	trips/hr x				
0.000	miles/roundtrip x				
8760	hrs/yr =		0.0	miles per year	
<b>For PM</b>		<b>For PM-10</b>			
9.21		$E_f = \{k^*[(s/12)^{0.8}]^*[(W/3)^b]/[(Mdry/0.2)^c] * [(365-p)/365]$			
10		=	1.93	lb/mile	
4.8		where k =	2.6	(particle size multiplier for PM-10) (k=10 for PM-30 or TSP)	
0.5		s =	4.8	mean % silt content of unpaved roads	
0.4		b =	0.4	Constant for PM-10 (b = 0.5 for PM-30 or TSP)	
25.5		c =	0.3	Constant for PM-10 (c = 0.4 for PM-30 or TSP)	
0.2		W =	25.5	tons average vehicle weight	
125		Mdry =	0.2	surface material moisture content, % (default is 0.2 for dry conditions)	
		p =	125	number of days with at least 0.254mm of precipitation (See Figure 13.2.2-1)	

	9.21 lb/mi x	0 mi/yr =	PM	0.00 tons/yr
	2000 lb/ton			
	1.93 lb/mi x	0 mi/yr =	PM-10	0.00 tons/yr
	2000 lb/ton			
All Trucking	Total PM:	218.35 tons/yr		
	Total PM-10:	44.75 tons/yr		

**\*\* storage \*\***

The following calculations determine the amount of emissions created by wind erosion of storage stockpiles, based on 8760 hours of use and AP-42, Ch 11.2.3.

E <sub>f</sub> = 1.7*(s/1.5)*(365-p)/235*(f/15)				
=	1.74	lbs/acre/day	for sand	
=	1.16	lbs/acre/day	for stone	
=	1.16	lbs/acre/day	for slag	
=	1.16	lbs/acre/day	for gravel	
=	1.16	lbs/acre/day	for RAP	
where s =	1.5	% silt	for sand	
s =	1.0	% silt	of stone	
s =	1.0	% silt	of slag	
s =	1.0	% silt	of gravel	
s =	1.0	% silt	for RAP	
p =	125	days of rain	greater than or equal to 0.01 inches	
f =	15	% of wind	greater than or equal to 12 mph	
E <sub>p</sub> (storage) = E <sub>f</sub> * sc * (20 cuft/ton) * (365 days/yr)				
(2000 lbs/ton)*(43560 sqft/acre)*(25 ft)				
=	0.029	tons/yr	for sand	
=	0.031	tons/yr	for stone	
=	0.000	tons/yr	for slag	
=	0.000	tons/yr	for gravel	
=	0.019	tons/yr	for RAP	
Total PM:	0.080	tons/yr		
where sc = 5,000 tons storage capacity for sand				
sc =	8	,000 tons storage capacity	for stone	
sc =	0	,000 tons storage capacity	for slag	
sc =	0	,000 tons storage capacity	for gravel	
sc =	5	,000 tons storage capacity	for RAP	
P M-10:	35%	of PM =	0.010 tons/yr	for sand
	35%	of PM =	0.011 tons/yr	for stone
	35%	of PM =	0.000 tons/yr	for slag
	35%	of PM =	0.000 tons/yr	for gravel
	35%	of PM =	0.007 tons/yr	for RAP
Total PM-10:			0.028	tons/yr

Emissions before controls (combustion plus production) are as follows:

natural gas		#2 oil		#4 oil		waste oil	
P M:	<b>30927</b> tons/yr	P M:	<b>30931</b> tons/yr	P M:	<b>N/A</b> tons/yr	P M:	<b>N/A</b> tons/yr
P M-10:	<b>7170</b> tons/yr	P M-10:	<b>7176</b> tons/yr	P M-10:	<b>N/A</b> tons/yr	P M-10:	<b>N/A</b> tons/yr
S O x:	<b>5.45</b> tons/yr	S O x:	<b>194.04</b> tons/yr	S O x:	<b>N/A</b> tons/yr	S O x:	<b>N/A</b> tons/yr
N O x:	<b>38.70</b> tons/yr	N O x:	<b>54.66</b> tons/yr	N O x:	<b>N/A</b> tons/yr	N O x:	<b>N/A</b> tons/yr
V O C:	<b>2.10</b> tons/yr	V O C:	<b>0.961</b> tons/yr	V O C:	<b>N/A</b> tons/yr	V O C:	<b>N/A</b> tons/yr
C O:	<b>32.14</b> tons/yr	C O:	<b>14.16</b> tons/yr	C O:	<b>N/A</b> tons/yr	C O:	<b>N/A</b> tons/yr
Lead:	<b>0.004</b> tons/yr	Lead:	<b>0.004</b> tons/yr	Lead:	<b>N/A</b> tons/yr	Lead:	<b>N/A</b> tons/yr
HAPs:	<b>8.32</b> tons/yr	HAPs:	<b>8.32</b> tons/yr	HAPs:	<b>N/A</b> tons/yr	HAPs:	<b>N/A</b> tons/yr

  

butane		propane	
P M:	<b>N/A</b> tons/yr	P M:	<b>N/A</b> tons/yr
P M-10:	<b>N/A</b> tons/yr	P M-10:	<b>N/A</b> tons/yr
S O x:	<b>N/A</b> tons/yr	S O x:	<b>N/A</b> tons/yr
N O x:	<b>N/A</b> tons/yr	N O x:	<b>N/A</b> tons/yr
V O C:	<b>N/A</b> tons/yr	V O C:	<b>N/A</b> tons/yr
C O:	<b>N/A</b> tons/yr	C O:	<b>N/A</b> tons/yr
Lead:	<b>N/A</b> tons/yr	Lead:	<b>N/A</b> tons/yr
HAPs:	<b>N/A</b> tons/yr	HAPs:	<b>N/A</b> tons/yr

## B. Source emissions after controls

<b>dryer combustion: gas</b>			
P M:	0.71 tons/yr x	<b>0.00074</b> emitted after controls =	<b>0.001</b> tons/yr
P M-10:	2.83 tons/yr x	<b>0.00074</b> emitted after controls =	<b>0.002</b> tons/yr
<b>dryer combustion: #2 oil</b>			
P M:	5.32 tons/yr x	<b>0.00074</b> emitted after controls =	<b>0.004</b> tons/yr
P M-10:	8.78 tons/yr x	<b>0.00074</b> emitted after controls =	<b>0.006</b> tons/yr
<b>hot oil heater combustion: gas</b>			
P M:	0.020 tons/yr x	<b>1.00000</b> emitted after controls =	<b>0.020</b> tons/yr
P M-10:	0.078 tons/yr x	<b>1.00000</b> emitted after controls =	<b>0.078</b> tons/yr
<b>hot oil heater combustion: #2 oil</b>			
P M:	0.147 tons/yr x	<b>1.00000</b> emitted after controls =	<b>0.147</b> tons/yr
P M-10:	0.243 tons/yr x	<b>1.00000</b> emitted after controls =	<b>0.243</b> tons/yr
<b>hot oil heater combustion: butane</b>			
P M:	0.000 tons/yr x	<b>0.00000</b> emitted after controls =	<b>0.000</b> tons/yr
P M-10:	0.000 tons/yr x	<b>0.00000</b> emitted after controls =	<b>0.000</b> tons/yr
<b>hot oil heater combustion: propane</b>			
P M:	0.000 tons/yr x	<b>0.00000</b> emitted after controls =	<b>0.000</b> tons/yr
P M-10:	0.000 tons/yr x	<b>0.00000</b> emitted after controls =	<b>0.000</b> tons/yr
<b>dryer combustion: #4 oil</b>			
P M:	0.00 tons/yr x	<b>0.00000</b> emitted after controls =	<b>0.000</b> tons/yr
P M-10:	0.00 tons/yr x	<b>0.00000</b> emitted after controls =	<b>0.000</b> tons/yr
<b>dryer combustion: waste oil</b>			
P M:	0.00 tons/yr x	<b>0.00000</b> emitted after controls =	<b>0.000</b> tons/yr
P M-10:	0.00 tons/yr x	<b>0.00000</b> emitted after controls =	<b>0.000</b> tons/yr
<b>dryer combustion: butane</b>			
P M:	0.00 tons/yr x	<b>0.00000</b> emitted after controls =	<b>0.000</b> tons/yr
P M-10:	0.00 tons/yr x	<b>0.00000</b> emitted after controls =	<b>0.000</b> tons/yr

**dryer combustion: propane**

P M:	0.00 tons/yr x	<u>0.00000</u> emitted after controls =	<u>0.000</u> tons/yr
P M-10:	0.00 tons/yr x	<u>0.00000</u> emitted after controls =	<u>0.000</u> tons/yr

**aggregate drying:**

P M:	30660.00 tons/yr x	<u>0.00074</u> emitted after controls =	<u>22.688</u> tons/yr
P M-10:	7117.50 tons/yr x	<u>0.00074</u> emitted after controls =	<u>5.267</u> tons/yr

**conveying/handling:**

P M:	14.35 tons/yr x	<u>1.000</u> emitted after controls =	<u>14.348</u> tons/yr
P M-10:	1.43 tons/yr x	<u>1.000</u> emitted after controls =	<u>1.435</u> tons/yr

**screening**

P M:	33.11 tons/yr x	<u>1.000</u> emitted after controls =	<u>33.113</u> tons/yr
P M-10:	3.31 tons/yr x	<u>1.000</u> emitted after controls =	<u>3.311</u> tons/yr

**unpaved roads:**

P M:	218.35 tons/yr x	50.00% emitted after controls =	<u>109.175</u> tons/yr
P M-10:	44.75 tons/yr x	50.00% emitted after controls =	<u>22.374</u> tons/yr

**storage:**

P M:	0.080 tons/yr x	50.00% emitted after controls =	<u>0.040</u> tons/yr
P M-10:	0.028 tons/yr x	50.00% emitted after controls =	<u>0.014</u> tons/yr

Emissions after controls (combustion plus production) are as follows:

	Butane	Propane	Gas	#2 Oil	#4 Oil	Waste Oil	
P M:	N/A	N/A	179.51	179.51	N/A	N/A	tons/yr
P M-10:	N/A	N/A	32.65	32.65	N/A	N/A	tons/yr

## II. Allowable Emissions

A. The following calculations determine compliance with 326 IAC 6-1, which limits stack emissions from this plant to 0.03 gr/dscf:

$$\begin{array}{rcl}
 \frac{0.03 \text{ grains}^*}{\text{dscf}} \times \frac{42000.000 \text{ acfm}^*}{525600 \frac{\text{minutes}^*}{\text{year}}} & \times & \frac{460 + \frac{528}{280} \text{ Temp}^*}{\frac{100}{100} - 1.6\% \text{ moisture}^*} \\
 & & \times \frac{1}{7000 \text{ grains}} \times \frac{1 \text{ ton}}{2000 \text{ lbs}} = \underline{33.212 \text{ tons/yr}}
 \end{array}$$

To meet 326 IAC 6-1 and NSPS Subpart I, the following value must be less than the amount calculated above: 22.84 tons/yr

B. The following calculations determine the maximum sulfur content of distillate #2 fuel oil allowable by 326 IAC 7:

$$\begin{array}{rcl}
 \text{limit:} & 0.5 \text{ lbs/MMBtu} & \\
 0.5 \text{ lbs/MMBtu} \times & \underline{140000.0 \text{ Btu/gal}} = & \underline{70.0 \text{ lbs/1000gal}} \\
 70 \text{ lbs/1000gal} / & \underline{144.0 \text{ lb/1000 gal}} = & \underline{0.486} \\
 \text{Sulfur content must be less than or equal to} & & \underline{0.486} \% \text{ to comply with 326 IAC 7} \\
 \text{and to limit SO}_2 \text{ emissions to 99 tons per year or less.} & & 
 \end{array}$$

C. The following calculations determine the maximum sulfur content of residual waste fuel oil allowable by 326-IAC 7:

$$\begin{array}{rcl}
 \text{limit:} & 1.6 \text{ lbs/MMBtu} & \\
 1.6 \text{ lbs/MMBtu} \times & \underline{0.000 \text{ Btu/gal}} = & \underline{0 \text{ lbs/1000gal}} \\
 0 \text{ lbs/1000gal} / & \underline{214.0 \text{ lbs/1000 gal}} = & \underline{0.000} \\
 & \text{(check burner type)} & \\
 \text{Sulfur content must be less than or equal to} & & \underline{0.000} \% \text{ to comply with 326 IAC 7} \\
 \text{and to limit SO}_2 \text{ emissions to 99 tons per year or less.} & & 
 \end{array}$$

D. The following calculations determine the maximum sulfur content of distillate #4 fuel oil allowable by 326-IAC 7:

$$\begin{array}{rcl}
 \text{limit:} & 0.5 \text{ lbs/MMBtu} & \\
 0.5 \text{ lbs/MMBtu} \times & \underline{0.000 \text{ Btu/gal}} = & \underline{0 \text{ lbs/1000gal}} \\
 0 \text{ lbs/1000gal} / & \underline{150.0 \text{ lbs/1000 gal}} = & \underline{0.000} \\
 \text{Sulfur content must be less than or equal to} & & \underline{0.000} \% \text{ to comply with 326 IAC 7} \\
 \text{and to limit SO}_2 \text{ emissions to 99 tons per year or less.} & & 
 \end{array}$$

### III. Limited Potential Emissions

#### FUEL USAGE LIMITATION: BASED ON NO<sub>x</sub>

##### FUEL USAGE LIMITATION FOR BURNER AND HOT OIL HEATER (Gas)

$$\begin{array}{rclclcl} 0.00 \frac{\text{tons NO}_x}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 0 \frac{\text{lbs NO}_x}{\text{year}} \\ \\ 0 \frac{\text{lbs NO}_x}{\text{year}} & / & 190.0 \frac{\text{lbs NO}_x}{\text{MMcf}} & = & 0.00 \frac{\text{MMcf}}{\text{year}} \\ \\ 0.00 \frac{\text{MMcf}}{\text{year}} & * & \frac{99.9 \text{ tons/yr}}{0.00 \text{ tons/yr}} & = & 0 \frac{\text{MMcf}}{\text{year}} \text{ FESOP Limit} \end{array}$$

##### FUEL USAGE LIMITATION FOR BURNER (#2 Oil)

$$\begin{array}{rclclcl} 0.00 \frac{\text{tons NO}_x}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 0.00 \frac{\text{lbs NO}_x}{\text{year}} \\ \\ 0.00 \frac{\text{lbs NO}_x}{\text{year}} & / & 24 \frac{\text{lbs}}{1000 \text{ gal}} & = & 0.00 \frac{\text{kgal}}{\text{year}} \\ \\ 0.00 \frac{\text{kgal}}{\text{year}} & * & \frac{98.0 \text{ tons/yr}}{0.00 \text{ tons/yr}} & = & 0.0 \frac{\text{kgal}}{\text{year}} \text{ FESOP Limit} \end{array}$$

##### FUEL USAGE LIMITATION FOR BURNER (#4 Oil)

$$\begin{array}{rclclcl} 0.00 \frac{\text{tons NO}_x}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 0.00 \frac{\text{lbs NO}_x}{\text{year}} \\ \\ 0.00 \frac{\text{lbs NO}_x}{\text{year}} & / & 24.0 \frac{\text{lbs}}{1000 \text{ gal}} & = & 0.00 \frac{\text{kgal}}{\text{year}} \\ \\ 0.00 \frac{\text{kgal}}{\text{year}} & * & \frac{98.0 \text{ tons/yr}}{0.00 \text{ tons/yr}} & = & 0.0 \frac{\text{kgal}}{\text{year}} \text{ FESOP Limit} \end{array}$$

##### FUEL USAGE LIMITATION FOR BURNER (Waste Oil)

$$\begin{array}{rclclcl} 0.00 \frac{\text{tons NO}_x}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 0.00 \frac{\text{lbs NO}_x}{\text{year}} \\ \\ 0.00 \frac{\text{lbs NO}_x}{\text{year}} & / & 16.0 \frac{\text{lbs}}{1000 \text{ gal}} & = & 0.00 \frac{\text{kgal}}{\text{year}} \\ \\ 0.00 \frac{\text{kgal}}{\text{year}} & * & \frac{98.0 \text{ tons/yr}}{0.00 \text{ tons/yr}} & = & 0.0 \frac{\text{kgal}}{\text{year}} \text{ FESOP Limit} \end{array}$$



#### FUEL USAGE LIMITATION FOR BURNER (Propane)

$$\begin{array}{rclclcl}
 0.00 \frac{\text{tons NOx}}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 0.00 \frac{\text{lbs NOx}}{\text{year}} \\
 0.00 \frac{\text{lbs NOx}}{\text{year}} & / & 19.0 \frac{\text{lbs}}{1000 \text{ gal}} & = & 0.00 \frac{\text{kgal}}{\text{year}} \\
 0.00 \frac{\text{kgal}}{\text{year}} & * & \frac{98.0 \text{ tons/yr}}{0.00 \text{ tons/yr}} & = & 0.0 \frac{\text{kgal}}{\text{year}} \text{ FESOP Limit}
 \end{array}$$

#### FUEL USAGE LIMITATION FOR BURNER (Butane)

$$\begin{array}{rclclcl}
 0.00 \frac{\text{tons NOx}}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 0.00 \frac{\text{lbs NOx}}{\text{year}} \\
 0.00 \frac{\text{lbs NOx}}{\text{year}} & / & 21.0 \frac{\text{lbs}}{1000 \text{ gal}} & = & 0.00 \frac{\text{kgal}}{\text{year}} \\
 0.00 \frac{\text{kgal}}{\text{year}} & * & \frac{98.0 \text{ tons/yr}}{0.00 \text{ tons/yr}} & = & 0.0 \frac{\text{kgal}}{\text{year}} \text{ FESOP Limit}
 \end{array}$$

#### FUEL USAGE LIMITATION: BASED ON SO2

##### FUEL USAGE LIMITATION FOR BURNER (Gas)

$$\begin{array}{rclclcl}
 0.000 \frac{\text{tons SO2}}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 0.00 \frac{\text{lbs SO2}}{\text{year}} \\
 0.00 \frac{\text{lbs SO2}}{\text{year}} & / & 0.6 \frac{\text{lbs SO2}}{\text{MMcf}} & = & 0.00 \frac{\text{MMcf}}{\text{year}} \\
 0.00 \frac{\text{MMcf}}{\text{year}} & * & \frac{93.3 \text{ tons/yr}}{0.00 \text{ tons/yr}} & = & 0.0 \frac{\text{MMcf}}{\text{year}} \text{ FESOP Limit}
 \end{array}$$

##### FUEL USAGE LIMITATION FOR BURNER and HOT OIL HEATER (#2 Oil)

$$\begin{array}{rclclcl}
 194.0 \frac{\text{tons SO2}}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 388000.00 \frac{\text{lbs SO2}}{\text{year}} \\
 388000.00 \frac{\text{lbs SO2}}{\text{year}} & / & 71.0 \frac{\text{lbs}}{1000 \text{ gal}} & = & 5464788.7324 \frac{\text{gal}}{\text{year}} \\
 5464788.73 \frac{\text{gal}}{\text{year}} & * & \frac{99.7 \text{ tons/yr}}{194.00 \text{ tons/yr}} & = & 2808451 \frac{\text{gal}}{\text{year}} \text{ FESOP Limit}
 \end{array}$$

**FUEL USAGE LIMITATION FOR BURNER (#4 Oil)**

<u>0.0</u> tons SO2	*	2000 <u>lbs</u>	=	<u>0</u> lbs SO2
year		ton		year
<u>0.00</u> lbs SO2	/	<u>75.0</u> lbs	=	<u>0</u> gal
year		1000 gal		year
<u>0.00</u> gal	*	<u>93.3</u> tons/yr	=	<u>0.0</u> gal FESOP Limit
year		0.00 tons/yr		year

**FUEL USAGE LIMITATION FOR BURNER (Waste Oil)**

<u>0.0</u> tons SO2	*	2000 <u>lbs</u>	=	<u>0.00</u> lbs SO2
year		ton		year
<u>0.00</u> lbs SO2	/	<u>107.0</u> lbs	=	<u>0.00</u> gal
year		1000 gal		year
<u>0.00</u> gal	*	<u>93.3</u> tons/yr	=	<u>0.0</u> gal FESOP Limit
year		0.00 tons/yr		year

**FUEL USAGE LIMITATION FOR BURNER (Propane)**

<u>0.00</u> tons SO2	*	2000 <u>lbs</u>	=	<u>0.00</u> lbs SO2
year		ton		year
<u>0.00</u> lbs SO2	/	<u>0.02</u> lbs	=	<u>0.00</u> gal
year		1000 gal		year
<u>0.00</u> gal	*	<u>93.3</u> tons/yr	=	<u>0.0</u> gal FESOP Limit
year		0.00 tons/yr		year

**FUEL USAGE LIMITATION FOR BURNER (Butane)**

<u>0.000</u> tons SO2	*	2000 <u>lbs</u>	=	<u>0.00</u> lbs SO2
year		ton		year
<u>0.00</u> lbs SO2	/	<u>0.02</u> lbs	=	<u>0.00</u> gal
year		1000 gal		year
<u>0.00</u> gal	*	<u>93.3</u> tons/yr	=	<u>0.0</u> gal FESOP Limit
year		0.000 tons/yr		year